NIBBLE NEWS

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HERE IT IS!

Well, NIBBLES NEWS has finally become a reality! Since this is our first issue, I'd like to introduce you to some of the people that will be writing articles for this newsletter, and discuss some of the areas which will be covered in the upcoming issues.

I'm Randy Ubillos, the author of Nibbles Away II. I will be editing most of the material which you see here, and also writing a good portion of it.

Bill Dieckmann will also be writing many articles in future months on various topics from disk protection to 'Fun With The Sector Editor'.

Mike Street will be helping out by keeping all of the latest parameters on file so that you have the most up to date information possible.

The main purpose for this newsletter is to bring you the most recent parameters, along with new and innovative ideas on how to get the most from Nibbles Away II, which, as many of you have already found out, is far more than just a 'disk backup system'.

We are always open to comments and/or suggestions, and we appreciate any parameters for programs which you can submit to us. These will be listed in the issues of NIBBLE NEWS along with the parameters that we generate here at COMPUTER:applications, Inc.

USAGE OF PARAMETER SHEETS

Listed on our Parameter Sheets are the parameters to change; to back-up certain pieces of software which require more than the default values. If a number is listed in the right-hand column, it corresponds to the number of the Auto-Load file which will perform the listed function. To use the Auto-Load files, see chapter 6 in the Nibbles Away II manual.

To use the parameters listed change the parameters listed under 'PARAMETERS TO CHANGE' and then copy the range of tracks specified under COPY TRACKS. If 'BY' is listed, this should be entered as the 'TRACK INCREMENT', if it is not listed, the default value of 01 should be used. Parameters which are assigned values can be accessed under the CONTROL parameter modifier. The parameters 'Addr' and 'Ins' listed below should be entered under 'ADDRESS MARK' and 'INSERT MARK', respectively, in the BACKUP modifier.

When the word SECTMOD appears it means that a sector is to be changed using The Track/Sector Editor. The destination disk should be placed into drive 1, then perform the changes listed. The command format is:

SECTMOD [F=NN,C=XX,S=YY,T=ZZ] / Change address A1 from A2 to A3

The meaning of NN,XX,YY,ZZ,A1,A2 and A3 are explained below:

NN---This will be either 13 or 16, and represents the disk format to be used, this should be set by selecting the 'O' option in the TSE and then pressing 'F' until the proper format is shown in inverse.

XX---This will be either ON or OFF and should be set using the checksum option on the options page, as above ('C' to toggle).

YY---This is the sector to be read in.

ZZ---This is the track to be read in.

After setting these options, use the 'R' option to read the given sector into the buffer. Then change the information in the sector following the convention listed below:

A1---This is the location to be changed in the buffer.

A2---This is the old value.

A3---This is the new value.

If multiple changes are listed, they should be performed in sequence.

After making changes to a sector, it should be written back out to the disk with the 'W' option.

Below is an example of a parameter listing, and how to enter it into NIBBLES AWAY][.

The parameter would be listed like this:

```
J o h n   D o e   S o f t w a r e   I n c:
ABC Programname ---- 0-A.............Addr=D5 AA 96
                     B-18 by 1.5.....Ins=DE AA EB, SYNC SIZ=0A
                     19.5-21.5.......FIND MAX=25
                      SECTMOD [F=16,C=OFF,T=01,S=05]
                         Change address 23 from 14 to 76
                         Change address 56 from 34 to 9A
                      SECTMOD [F=16,C=OFF,T=02,S=0F]
                         Change address 10 from 47 to 48
```

To perform this parameter, we must do the following steps:

1. The 'Addr' must be entered by going into the 'BACKUP' modifier. To do this you press 'M' for modify, then 'B' for backup. NIBBLES AWAY][then asks if you would like to 'USE ADDRESS MARK'. You should answer 'Y', then you will be prompted to enter the address mark. Enter it as shown, in this case type 'D5 AA 96' and the RETURN to enter the value. Since we are not entering any other parameters on this page we can press return for all of the rest of the questions on this page. From the MODIFIER menu, we can press 'Q' to go back to the main menu. Since no other changes are listed to the right side of the first line in our parameter, we can procede to copy the tracks.

2. We select 'N' from the main menu to enter the backup system. Then we should select 'Y' since we wish to change the starting and ending track values listed on the screen. By pressing return for the values prior to the starting track parameter, their values will not change. We should now enter in the starting track listed, in this case it is zero. Then we press return and enter the ending track, then press return. Entering return for the rest of the values will leave them as they are. Then we are prompted to insert our original and duplicate diskettes into their respective drives and press a key. This will cause the first line of our parameter to execute.

3. The next step lists some changes on the right hand side, so we must do these first. The first is an insert mark, which is done through the BACKUP modifier. We enter this as we did above, by pressing 'M' and then 'B'. We are now again asked if we wish to enter an address mark, and our previous address mark is still showing. Since the parameter does not say to remove the address mark, we should leave it as is. Pressing return will select the default value of 'Y' and move us to the line where we can enter an address mark. Pressing return again will move us to the next question and leave the address mark unchanged. The next question asks if we wish to use an insert mark. We should answer 'Y' to this question, and then enter the insert mark as shown in the parameter, 'DE AA EB', and then press return.

4. After this we answer with a return to the rest of the questions on this page, which returns us to the MODIFIERS menu. The next item to change is a name with a value equated to it. Any item of this type is found in the CONTROL modifier menu. We can select this menu by typing 'C' from the MODIFIERS menu. Two columns of names will be shown on the screen with our parameter, SYNC SIZ, shown in the second column. We can use the left and right arrow keys to move the cursor so that it is positioned next to the parameter we desire. Pressing the space bar will then prompt for a new value to be entered, in our case we wish to enter a '0A'. Pressing return will place the new value into the list, and we can press 'Q' to return to then MODIFIERS menu, and since no more changes are listed to the right, we can press 'Q' again to return to the main menu.

5. Now we want to press 'N' to enter the backup system, and enter 'Y' to change the track locations listed. We move down as shown above, and enter '0' as the starting track, '18' as the ending track, and '1.5' as the track increment. We then enter return for the rest of the values and press space to start this section of the backup.

6. For the next line, we must change an item which is on the CONTROL modifiers menu. To do this we enter 'M' and then 'C' as we did above. We then move the cursor to 'FIND MAX' in the right hand column, press space to enter a new value, and type in '25' followed by a return. Then we press 'Q' twice to get back to the main menu.

7. Then we use the 'N' option to enter the backup system, and enter the starting and ending track locations as before, noting that the track increment has automatically gone back to 1, which is what we want since none is specified in the current line of our parameter. We answer all of the rest of the questions, and then press space to complete this portion of the parameter.

8. Now we begin the SECTORMODs. To do this we must first remove both disk from their drives, and then place the duplicate disk into drive 1. Then we enter the sector editor to begin. The first item listed is at track 01, sector 05. To set this we must select 'T', which will prompt for a track, where we enter 01 and return, and then we select 'S', which prompts for a sector, and enter 05 and return. Now we press 'O' to enter the options page. The format listed on the screen will be 16, the same as the one that we want, but the checksum will be on, and we want it off. To change this we simply press 'C' and the value will toggle to 'OFF'. Now we press return to get back to the sector editor. At this point we press 'R' to read the sector from the disk into the screen buffer. The disk may make a few noises, but in a few seconds the data displayed should change and the disk drive will go off.

9. To change address 23 we must move the cursor to that position, in this case we would have to move down 2 locations with the 'M' key (the I,J,K, and M keys move the cursor in the standard control diamond), and over three locations with the 'K' key (remember, the leftmost position is 0, not 1). The value under the cursor should now be as listed in the parameter, in this case a 14. To change this we press the space bar, and type in the new value, in our case it would be a 76, and then press return to enter the value. Now we have another change to make to this same sector, so we move the cursor to location 56, and change the 34 that should currently be there to a 9A. Now that all of the changes to this sector have been made, we can write the sector back to the disk with the 'W' command.

10. The second SECTMOD listed uses a different track and sector location so we must set these new values to perform the last step of this parameter. We set the track value to 02 and the sector value to 0F, and then check to see that the format is still set to 16, and the checksum is still off. We then read the secto with the 'R' option, and move the cursor to location 10. Here we change the 47 which should be there to a 48. Now we can write the sector back to the disk with the 'W' command.

At this point we have completed the backup, and the disk in drive 1 should be a working back-up of your original disk. As in this example, all parameters should be performed from top to bottom, exactly as shown.

BEGINNERS GUIDE

Step by Step guide to backing-up diskettes
with
NIBBLES AWAY][

There are three basic steps to backup a diskette:

1. Locate the tracks which contain data.
2. Find the address marker for the sectors there.
3. Figure out any additional protection.

(Hint: #3 is the hard one!)

For most of the procedures below, a basic working knowledge of the Track/Bit Editor (TBE) is required. For those who are not familiar with the TBE, an overall description and some examples are given below. The examples are easier to understand if they are performed as you read this, so you may want to boot up NIBBLES AWAY][and try them out to get a better understanding of what is going on.

Enter the TBE by selecting option 'T' from the main menu. A large section of numbers will appear on the screen, with two dashed lines at the top. The information in between these lines is the status information and informs you of such things as cursor position, track number, and is also the location where various prompts appear for certain functions. The numbers at the bottom are separated into two sections. On the left are the starting memory address's for each line to the right. Move the cursor around using I,J,K or M, and watch the ADDR indicator in the status line. It will tell you exactly what memory address the value under the cursor represents. The arrow keys change the area of memory which you can see. They shift your view 256 bytes forward or backward at a time. The only really important thing to know for this discussion is how to use the arrow keys to move the viewing 'window' around in memory.

The ';' (unshifted '+') and the '-' keys increment and decrement the track number in the status line. Pressing 'R' will cause drive one to read the data from the track indicated in the status line into memory. The bytes on the screen will change, since different data has been read in. Pressing the 'R' key multiple times will result in different data being displayed. This is because NIBBLES AWAY][starts reading at whatever point happens to be under the head when the drive is turned on, which is random, hence the change in the displayed data (the data is not actually different, it is just not loaded at the same memory location as it was previously).

STEP 1:

To do this we must locate all of the tracks on the disk which contain data. To do this we should have the track pointer set to track ##. Pressing 'R' will read in the track and show it on the screen. The arrow keys should be used to move the viewing 'window' to start at $2###. Now we will move forward and try to determine if this track contains valid data. Actually, track ## MUST contain some data in order for the disk to boot, but we will be using this procedure on other tracks which do not necessarily contain data.

The main thing which will identify a track as containing data is the presence of GAPs. GAPs are sections of the same byte repeated several times. Normally they are made up of $FF's and are 6-20 in length. To see what these look like, insert your system master disk and read in track ## as described above. Moving through the buffer with the arrow keys will reveal a large variety of values. Spaced out among these should be sections of FF's which contain about 6-20 in a row, depending on the exact disk. Normally DOS 3.2 disks have larger GAPs than DOS 3.3 disks. There should be many occurances of the GAPs, spaced out so that you see one about every other time that you use the arrow keys to move forward or backward.

NOTE: You may see a second, smaller (2-5 $FF's), GAP following a large GAP, with a small section of data in between. This is called the secondary GAP. When refering to a GAP here, we will always be talking about the primary GAP, not the secondary one.

Now try looking at other tracks on the disk. First look only at the full tracks (no .5 on the end). All of them will be similar to track ## in the appearance of the GAPs. You may want to try this several times to become comfortable with locating GAPs on a given track.

Now read in a half track (.5 on the end). Scan memory to lacate some of the GAPs. Since system master disks do not use half-tracks, the data which we see here is really 'cross-talk'. In other words, data was written on the full track, but the magnetic pattern spread out a bit, and so we see some data here. The tell-tale sign of this phenomena is that the GAPs will not be all the same. That is, they may have one or more values in them which are not consistent. This tells us that there is some data on this track, but that it is not valid data. Take a look at some other half-tracks so that you can tell if you are looking at a full track or a half track by examining the GAPs.

The next item which you need to be able to identify is a blank track. To do this, insert a blank (NON-initialized) disk into drive one. Read any track on this disk and scan through the memory addresses. There will be no GAPs found, and many of the bytes seen on a track like this will end in 0 (i.e. $A0,$B0,$E0), which are not legal disk bytes. This means that the controller can find no valid data on the track. Some disks have portions of tracks which are not used, so you should always be sure to examine at least 24 screenfulls of information to make sure that there is no data at any point on the track.

Our next tool for finding data is the fact that valid data MUST be at least 1 track apart. In other words, if you locate data on track 3.5, then track 4 cannot have data and the next place where data can be is track 4.5. This is very helpful for finding tracks with data.

NOTE: If you locate data on a given track, it is a good idea to look at the tracks one half track to either side, to make sure that they look less valid than the one that you have selected as the real one.

Well, now that we know how to loacate data on a track, we can begin at track 0 and step towards track 22, checking each track to see if it appears to have data on it. Most disks have a pattern to the position of the data, and if you can figure it out, you may be able to just check a few tracks to make sure, and then go on to step 2. Otherwise the data must be located one track at a time.

Most disks use the standard tracks (1,2,3,...,22), but there are some which use half-tracks and some which use all the way out to track 23 (which, by the way cannot be read on all drives since no drives were ever designed to go out that far).

When all tracks which contain some type of data are located, we can move on to step 2.

STEP 2:

Now we must tell NIBBLES AWAY][how to read the information on the tracks which we have found to contain valid data. This is done by going back to each of these tracks with the TBE and finding the Address mark for each one. The Address mark will be the first 3 bytes following the GAP. To see this in operation, take a look at a track from your system master disk. After each GAP you will see either 'D5 AA 96' for a DOS 3.3 master disk, or 'D5 AA B5' for a DOS 3.2 disk. These values should be noted down alongside of each track number which contains data. Many times there will be only one, or maybe 2 patterns for all tracks.

After this, we are ready to back-up these tracks. This is done by exiting the TBE (use 'Q') and then selecting 'M' for the modifiers menu. Then select 'B' for BACKUP modifier. When asked 'USE ADDRESS MARK' answer 'Y' and then type in the address mark which you noted down for the range of tracks to be backed-up. Simply press return to the rest of the questions and then return to the main menu. Select 'N' to enter NIBBLES AWAY][, and answer 'Y' to the question 'CHANGE DEFAULT OPTIONS'. Use the <RETURN> key to move to the 'START TRACK' prompt, and then enter the first track to be backed-up. Press return and then type in the last track to be backed-up with the current address marker setting. If the tracks in the specified range are not spaced at 1 track intervals, enter the interval at the 'TRACK INCREMENT' prompt. Press return for the following questions and begin the backup after inserting the disks when prompted. When you return to the main menu, repeat the above procedure for each range of tracks which contains a different address marker.

Now comes the moment of truth! Try to boot up the backed-up disk (if the original had a write-protect tab, the back-up should too!). If the backup boots, then all went succesfully.

STEP 3:

If the back-up did not work properly then there are a few things to look for.

1....Did all of the tracks which should have backed-up do so? This can be seen while the back-up takes place as a 'Y' or an 'N' under that tracks status location. If some did not, then the address marker was probably not determined properly. If this is the case, then go back to the TBE and try those tracks again.

2....If everything seemed to go well, but the backup refuses to work (you may want to try the procedure again, maybe with the source and destination drives reversed, to make sure it was not a power glitch or other such occurance which messed things up) the next step is to try the procedure with the 'SYNCHRONIZED COPY' option selected. Disks which use this method often make violent head movements during their boot procedure. This can be a clue to this type of protection.

Additional information:

On some DOS 3.3 diskettes, the GAPs between the sectors are reduced in size. In some cases they can be as small as 4 or 5 bytes. When NIBBLES AWAY][finds the beginning of a section of data, it normally adds 8 bytes of SYNC just before the data. This will normally put SYNC bytes into the GAP before the data, where it should be. However, if a disk has very small GAPs, then the added SYNC can overwrite the end of the previous sector. The parameter FIX AMNT controls the number of SYNC bytes which are added, so this value can be reduced to prevent any data from being overwritten. The value that NIBBLES AWAY][uses for the SYNC which it puts in is contained in the parameter FIX VALU. Normally this is a $7F, but it can be set to any desired value.

It should be noted that NIBBLES AWAY][regards any data byte which has its high bit cleared to be a SYNC byte. So the $7F which is normally in this parameter means that a SYNC $FF is to be added. If the 'OVERIDE STANDARDIZER' option is selected, then NIBBLES AWAY][will not add any bytes, it will simply convert the data which is present before a sector into SYNC, without changing its value. This technique can also be used for disks whose GAPs are very small.

Another item to watch for is disks whose tracks appear to be very long. Some disk protection schemes put garbage on a portion of the track. When this garbage is read back, more bytes are read in than were written out. This causes the track to be longer than normal, and in some cases it becomes so long that the default parameters for NIBBLES AWAY][cannot find the data properly. The parameters DATA MIN and DATA MAX control the minumum and maximum track lengths (in increments of 256 bytes) which NIBBLES AWAY][will accomodate. The normal value of DATA MAX is $1D, but this can be set to a higher value, such as $25, if a track appears to be very long. Even though the track may read in as a large number of bytes, many of these will be removed by the nibble filter, since they are garbage bytes. This will assure that the amount of data written back out will not be to large to fit on the destination track.

When NIBBLES AWAY][finds a sector of data, it looks forward in the data to find a second occurance of the same pattern. This insures that the sector has been read in and located correctly. On many disks, there is a primary section of data, called the address field, and the the actual data field follows. In between these is a small GAP, and many times it contains random information. This means that NIBBLES AWAY][should only match the number of bytes which are found in the address field, since the bytes in the GAP may not read as the same value every time. The parameter FIND MAX controls the number of bytes which are checked during this procedure. The default value of $0C works in most cases, but some disks use a smaller address field which may require this parameter to be set to a smaller value. However, if this parameter is set too low, then NIBBLES AWAY][may identify the match for a section of data whose first few bytes are the same, but which differ later on. Therefore one should excersize caution when lowering this value.

U S E R C O N T R I B U T E D P A R A M E T E R S

The following parameters have been received from Nibbles Away II users, and have not been tested by COMPUTER:applications, Inc.

COMPANY NAME: PROGRAM NAME	COPY TRACKS	PARAMETERS TO CHANGE	AUTO-LOAD FILE TO USE
I n S o f t:			
Electric Duet -----	0-22.....	Addr=D5 AA 96 Ins= DE AA EB Overide Standardizer Fix Amnt=04	
I D S:			
Prism Print -------	0-21.....	Addr=D5 AA 96 Overide Standardizer SECTMOD [F=16,C=ON,T=21,S=00] Change address 27 from FB to 22	
S o f t w a r e P u b l i s h i n g C o r p.:			
PFS/PFS Report ---- (Revised)	0-13.....	Addr=D5 AA 96 Overide Standardizer Gap Byte 1=C0, Gap Byte 2=D0 Filter=C0-C9 (no inverse)	
	N O T E: Write Protect before booting!!		
PFS Graph ---------	0-22.....	Addr=D5 AA 96 Overide Standardizer Gap Byte 1=C0, Gap Byte 2=D0 Filter=C0-C8 (no inverse)	
	N O T E: Write Protect before booting!!		
P h o e n i x S o f t w a r e:			
Zoom Graphics ----- 2nd Edition	0-22 by 2.....	Addr=D5 AA 96 Ins=DD AA ED B5	
	1-21 by 2.....	Addr=D4 AA 96	
S e n s i b l e S o f t w a r e:			
Image Printer -----	0-2.....	Addr=D5 AA 96	
	3-7.....	Addr=F7 AA 96	
	9-22	SECTMOD [F=16,C=OFF,T=0,S=03] Change address 42 from 38 to 18 SECTMOD [F=16,C=OFF,T=2,S=03] Change address 2A from 2C to 4C Change address 2B from 06 to 5D Change address 2C from B7 to B4	

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COMPANY NAME: PROGRAM NAME	COPY TRACKS	PARAMETERS TO CHANGE	AUTO-LOAD FILE TO USE
Adventure International:			
Eliminator	0-21	Addr=D5 AA 96 SECTMOD [F=16,C=OFF,T=03,S=0D] Change address 2E from 20 to EA Change address 2F from 30 to EA Change address 30 from 72 to EA	
Apple Computer:			
Visicalc ///	0-22	SYNC	
Apple Writer ///	0-22	SYNC	
Apple Logo	0-0 2-22	Addr D5 AA 96 Addr D5 AA 96 SECTMOD [F=16,C=OFF,T=0,S=0A] Change address 79 from 4C to EA Change address 7A from 00 to EA Change address 7B from C6 to EA	
Apple Writer II	0-3 4-22	Addr D5 AA DA Addr D5 AA 96	
Avante-Garde Creations			
Zero Gravity Pinball	0-22	Addr=D5 AA B5	
BPI:			
Accounting System	0-22 11-11	Addr=D5 AA 96 Ins=AD FB E6 FF E6 SYNC SIZ=0A	15
Broderbund Software:			
Apple Panic	0-D		
Genetic Drift	0-0 1-3 4.5-6 by 1.5 7.5-8.5 D-D E.5-12.5	Addr=D5 AA B5 Addr=BB D5 BB Addr=D4 D5 BB Addr=AD B5 DE	
Space Quarks	0-0 1-2 3.5-5.5 7-9 by 2 A.5-B.5 D-15	Addr=D5 AA B5 Addr=FF DF DE, DATA MAX=25 	
Space Warrior	0-0 2.5-3.5 5-8 by 3 6.5-6.5 A-10 by 3	Addr=D5 AA B5, DATA MAX=30 Addr=DF AD DE 	

```
Budgco:
Raster Blaster ---- 0-0.............Addr=D5 AA 96, SYNC
                                    DATA MIN=18, DATA MAX=40
                    5-11 by 4......Addr=AD DE, DATA MIN=13, SYNC
                    6-12 by 4......SYNC
                    7.5-F.5 by 4...SYNC
                    1.5-3.5 by 2...SYNC
Cavalier  Computer:
Microwave --------- 0-22............Addr=D5 AA 96
                     SECTMOD [F=16,C=ON,T=02,S=01]
                        Change address DA from A9 to AD
                        Change address DB from 60 to 03
                        Change address DC from 8D to 81
                        Change address DD from 7E to 60
Continental  Software:
Guardian ---------- 0-1.............Addr=D5 AA B5
                    2-11............Addr=D6 AA B5
                                    Ins=DF AA EB F7, SYNC SIZ=0A
Data  Most:
County Fair ------- 0-22............Addr=D5 AA B5
Snack Attack         SECTMOD [F=13,C=OFF,S=03,T=00]
                       Change address 63 from 38 to 18
Swashbuckler ------ 0-22............Addr=D5 AA 96
Casino 21            SECTMOD [F=16,C=OFF,S=03,T=00]
                       Change address 42 from 38 to 18
Data  Soft:
Dung Beetles ------ 0-0.............Addr=D5 AA B5
                    1-1.............Addr=F5 F6 F7
                    4-22
                     SECTMOD [F=13,C=ON,T=00,S=01]
                        Change address 6D from 01 to 7B
                        Change address 6E from 61 to 69
Gebelli  Software:
Firebird ---------- 0-0.............Addr=DD AD DA, SYNC          7
                    1.5-B.5........SYNC
Howardsoft:
Tax Preparer ------ 0-22............Addr=D5 AA 96                Dos 3.3
Infocom:
Deadline ---------- 0-22............Addr=D5 AA 96                Dos 3.3
Innovative  Design  Software:
Pool 1.5 ---------- 0-15............Addr=D5 AA B5
                    1E-21
                      SECTMOD[F=13,C=OFF,T=0B,S=07]
                         Change address 6A from 8D to 60
                      SECTMOD[F=13,C=OFF,T=00,S=03]
                         Change address 63 from 38 to 18
```

```
LJK Enterprises:
Letter Perfect ---- 0-22.....Addr=D5 AA B5                Dos 3.2
Level 10 Software:
Neutrons ---------- 0-22.....Addr=D5 AA 96                    1
Lightning Software:
Master Type ------- 0-2.....Addr=D5 AA B5
                    3-22.....Addr=D4 AA B5
                                (Error on $1B OK)
                    SECTMOD [F=13,C=OFF,S=03,T=00]
                        Change address 63 from 38 to 18
                    SECTMOD [F=13,C=OFF,S=0A,T=02]
                        Change address 2E from 23 to 2E
Magna Soft:
Tunnel Terror ----- 0-0.....Addr=D5 AA B5
                    1-12.....Addr=D6 AA B5
                                Ins=DF AA D7 EB, SYNC SIZ=0A
Micro Lab:
Peeping Tom ------- 0-0.....Addr=D5 AA B5
                    1-1.....Addr=F5 AB BE
                    4-22
                     SECTMOD [F=13,C=ON,T=00,S=01]
                         Change address 6D from 01 to 7B
                         Change address 6E from 60 to 68
Roach Hotel ------- 0-0.....Addr=D5 AA B5
                    1-1.....Addr=EE EA FE
                    4-22
                     SECTMOD [F=13,C=OFF,T=00,S=01]
                         Change address 75 from 01 to 7B
                         Change address 76 from 61 to 69

VisiFactory ------- 0-22.....Addr=D5 AA 96
                     SECTMOD [F=16,C=OFF,T=00,S=03]
                         Change address 42 from 38 to 18
                     SECTMOD [F=16,C=OFF,T=01,S=00]
                         Change address 84 from 4C to AD
                         Change address 85 from 8E to E9
                         Change address 86 from AE to B7

Invoice Factory --- 0-22.....Addr=D5 AA 96
Mind Toys:
Jabbertalky ------- 0-22.....Addr=D5 AA 96                 Dos 3.3
Ricochet ---------- 0-22.....Addr=D5 AA 96                 Dos 3.3

Online Systems:
Cranston Manor ---- 0-22.....ERASE DEST TRACKS
Expediter II ------ 0-22.....Addr=D5 AA 96                     2
                                ERASE DEST TRACKS
```

```
Gobbler ---------- 0-22.....Addr=D5 AA B5                    1
                             ERASE DEST TRACKS
Jaw Breaker ------- 0-22.....Addr=D5 AA B5                    1
                             ERASE DEST TRACKS
Hires Adv #1 ------ 0-22.....Addr=D5 AA B5                 Dos 3.2
Hires Adv #2 ------ 0-22.....Addr=D5 AA B5                 Dos 3.2
Paddle Graphics --- 0-23.....Addr=D5 AA B5
Hires Soccer ------ 0-22.....Addr=D5 AA B5, SYNC             20
Thrilogy ---------- 0-22.....Addr=D5 AA B5, SYNC             20
Hires Cribbage ---- 0-22.....Addr=D5 AA B5, SYNC             20
Missile Defense --- 0-22.....Addr=D5 AA B5, SYNC             20
Marauder ---------- 0-22.....Addr=D5 AA 96, Overide Standardizer
                    SECTMOD [F=16,C=ON,T=03,S=07]
                      Change Address 90 from A8 to 60
Pegasus II -------- 0-22.....Addr=D5 AA B5                    1
                             ERASE DEST TRACKS
ScreenWriter ][ --- 0-22.....Addr D5 AA 96
                                   Sync Siz=0A, Fix Amnt=04
                    SECTMOD [F=16,C=ON,T=03,S=0B]
                     Change Address 94 from 20 to EA
                                    95 from 00 to EA
                                    96 from 7F to EA
                    SECTMOD [F=16,C=ON,T=13,S=04]
                     Change Address 4D from 20 to EA
                                    4E from 00 to EA
                                    4F from 60 to EA
Softporn ---------- 0-22.....Addr=D5 AA B5                    1
  Adventure 3.2              ERASE DEST TRACKS
Softporn ---------- 0-22.....Addr=D5 AA 96                    2
  Adventure 3.3              ERASE DEST TRACKS
Threshold --------- 0-22.....Addr=D5 AA B5                    1
                             ERASE DEST TRACKS
Ulysses & --------- 0-22.....Addr=D5 AA 96                    2
  Golden Fleece              Erase DEST TRACKS
Time Zone  (V1.0)
     Disks A-L ---- 0-22.....Addr=D5 AA 96, 'OVERIDE STANDARDIZER'
 then Disk A ------ SECTMOD [F=16,C=ON,T=03,S=05]
                      Change address 5B from 4C to 60
                    SECTMOD [F=16,C=ON,T=03,S=03]
                      Change address AB from A9 to 60
Time Zone  (V1.1)
     Disks A-L ---- 0-22.....Addr=D5 AA 96
 then Disk A ------ SECTMOD [F=16,C=ON,T=03,S=00]
                      Change address D9 from FC to 00
                      Change Address DA from 08 to 13
Cannonball Blitz -- 0-22.....Addr=D5 AA 96
                    SECTMOD [F=16,C=ON,T=17,S=0E]
                      Change address CD from 49 to 60
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Mouskattack ------- 0-22.....Addr=D5 AA 96
                    SECTMOD [F=16,C=ON,T=18,S=03]
                      Change address B1 from 49 to 60
P e r s o n a l   B u s i n e s s   S y s t e m s:
Executive -------- 0-22.....Addr=D5 AA 96              Dos 3.3
  Secretary
P i c a d i l l y   S o f t w a r e:
Suicide ---------- 0-0.....Addr=D5 AA B5
                    11.5-22 by 1.5.Addr=DF AD DE
Star Blaster ------ 0-0.....Addr=D5 AA 96
                    7-20 by 1.5....Addr=DF AD DE
P h o e n i x   S o f t w a r e:
Zoom Grafix ------- 0-0.....Addr=D5 AA 96, Ins=DD AA ED B5
                                Sync Siz=0A
                    1-22.....Addr=D4 AA 96
P r o f e s s i o n a l   S o f t w a r e   T e c h n o l o g y:
Executive --------- 0-22.....Addr=D5 AA 96, Overide Standardizer
  Briefing System    SECTMOD [F=16,C=ON,T=21,S=00]
                      Change Address 27 from FB to 22
R i v e r b a n k   S o f t w a r e
International ----- 0-C.....Addr=FF FF FF AA
Grand Prix

S e n t i e n t   S o f t w a r e
Gold Rush --------- 0-22.....Addr=D5 AA 96

S i l i c o n   V a l l e y   S o f t w a r e:
Word Handler II --- 0-0.....Addr=D5 AA 96
                    11-22
                    1-C.....Addr=FF DF DE
S i r i u s   S o f t w a r e:
Autobahn ---------- 0-0.....SYNC                        6
                    4-6.....SYNC
                    9.5-C.5.....SYNC
Beer Run, --------- 0-0.....Addr=DD AD DA, DATA MAX=25, SYNC
Copts & Robbers,    1.5-13.5.....SYNC
Epoch, Hadron,
Snake Byte
NOTE: Errors will begin to occur somewhere between track C.5 and track 13.5,
     depending on the particular disk. This is normal.
Gorgon ------------ 0-0.....Addr=DD AD DA, DATA MAX=25, SYNC
                    1.5-C.5.....SYNC
                    E.5-E.5.....SYNC
                    D.5-D.5.....Addr=D5 AA B5, SYNC
Sneakers ---------- 0-0.....Addr=DD AD DA, SYNC
                    1.5-C.5.....SYNC
                    D.5-D.5.....Addr=D5 AA B5, SYNC
```

```
Gamma Goblins ----- 0-0.............Addr=DD AD DA, SYNC
                    1.5-B.5.........SYNC
                    D-D.............Addr=FF FF FF D5 AA EE
                                    DATA MAX=30
Orbitron ---------- 0-0.............Addr=DD AD DA, DATA MAX=25, SYNC
                    1.5-E.5.........SYNC
                    F.5-F.5.........Addr=FF B5 D5 AA
Outpost ----------- 0-0.............Addr=DD AD DA, SYNC
                    1.5-9.5.........SYNC
                    B.5-B.5.........Addr=D5 AA AD, DATA MAX=25
Pulsar II --------- 0-C                                          18
                    13-19
                    1A.5-1D.5
Dark Forest ------- 0-0.............Addr=DD AD DA, SYNC
                    1-22............Addr=D5 AA A5, SYNC
                         (Errors on 6-8 and last few tracks OK)
Twerps ------------ 0-0.............Addr=DD AD DA, SYNC
                    1.5-E.5.........SYNC
                    1A-1A
Borg -------------- 0-0.............Addr=DD AD DA, SYNC
                    1.5-B.5.........SYNC
                    D-20............SYNC
S o f t w a r e   P u b l i s h i n g   C o r p
PFS/PFS Report ---- 0-0.............Addr=93 F3 FC FF
                                    Ins=93 F3 FC FF
                                    Offset -2, SYNC SIZ=0A
                    1-13............Addr=D5 AA 96, Ins=D5 AA 96
NOTE: Write Protect the backup diskette BEFORE using!!!

S o f t a p e:
Photar ------------ 0-22............Addr=D5 AA 96                Dos 3.3

S p e c i a l   D e l i v e r y   S o f t w a r e:
Personal ---------- 0-22............Addr=D5 AA 96                Dos 3.3
  Finance Manager

S t o n e w a r e:
DB Master (old) --- 0-5.............Addr=D5 AA 96                  9
                    6.5-22.5
DB Master (new) --- 0-5.............Addr=D5 AA 96, SYNC           19
                    6.5-22.5

S t r a t e g i c   S i m u l a t i o n s:
Cartels & --------- 0-0.............Addr=D5 AA B5                 10
  Cuthroats         2-22............Addr=DB D5 DE
Operation           1-1.............Addr=D5 AA DA FF
  Apocalypse
Torpedo Fire ------ 0-22............Addr=D4 AA B7
```

```
S u b l o g i c:
FS-1 ------------- 0-0                                          13
                   1.5-21 by 1.5..Addr=DB AB BF
                                  REDUCED ERROR CHECK
                   7-8............REDUCED ERROR CHECK
                   9.5-9.5........REDUCED ERROR CHECK
Saturn Navigator -- B-22..........Addr=D5 AA FD, FIND MAX=08     14
                         (Errors on $11 and $17 OK)
                   6.5-6.5........FF FF D5 AA, FIND MAX=0C
                   0-4............Addr=D5 AA B5
                   11-11
Escape ------------ 0-22..........Addr=D5 AA 96              Dos 3.3
A2-PB1 Pinball ---- 0-0............Addr=D5 AA 96, DATA MAX=25
                   1-15...........Addr=DB AB BF
S y n e r g i s t i c   S o f t w a r e:
Escape from ------- 0-22..........Addr=D5 AA 96, 'OVERIDE STANDARDIZER'
   Arcturus                       'OVERIDE NIBBLE FILTER'

T u r n k e y   S o f t w a r e:
Ceiling Zero ------ 0-2............Addr=D5 AA B5
                   3-11...........Addr=D6 AA B5
                                  Ins=DE AA EB F9, SYNC SIZ=0A
U S A   S o f t w a r e:
Apple World ------- 0-23
Star Dance -------- 0-22..........Addr=D5 AA B5              Dos 3.2

V i s i c o r p:
Visicalc 3.3 ------ 0-0............Addr=D5 AA 96
                   2-22...........Addr=D5 AA B5
                              (Errors toward end OK)
Visidex ----------- 0-22..........Addr=D5 AA 96, Ins=DE AA EB FD
                                  SYNC SIZ=0A, FIX AMNT=04
Visiterm ---------- 0-22..........Addr=D5 AA 96, Ins=DE AA EB FC
                                  SYNC SIZ=0A, FIX AMNT=04
Visitrend --------- 0-22..........Addr=D5 AA 96, Ins=DE AA EB
  /Visiplot                       SYNC SIZ=0A, FIX AMNT=04
Desktop Plan II --- 0-22..........Addr=D5 AA 96, Ins=AA EB FD
                                  SYNC SIZ=0A, FIX AMNT=04
Visifile ---------- 0-22..........Addr=D5 AA 96, Ins=DE AA EB
                                  SYNC SIZ=0A, FIX AMNT=04
Visischedule------- 0-22..........Addr=D5 AA 96, Ins=DE AA EB EC
                                  SYNC SIZ=0A, FIX AMNT=04

X P S   S O F T W A R E
Apple-cillin------- 0-D............Addr=D5 AA 96
```

Other fine products from COMPUTER:applications, Inc.

APPLE - LINK

A Communications System

〈 Price 〉
〈 $ 59.95 〉

〈 F R E E 〉
〈 Back-up 〉

F E A T U R E S

- **TRANSMIT & RECEIVE**.....Send or Receive '**ANY**' type of file between Apple II Systems; (Inc. Random Access Text, and Relocatable)

- **EASY TO USE**.....Complete **MENU DRIVEN** operation requires **NO** previous Communications experience.

- **MULTI-FILE TRANSFER**.....Select as many files as desired for Transmit or Receive, with complete **AUTOMATIC** file transfer.

- **UNIQUE FILE SELECTION**...Both SEND & RECEIVE catalogs are displayed on screen, with '**Single Keystroke Selection**' of files, 〈as many as you want !〉, for transfer. NO File Conversions by User. Just Select and Go...

- **REAL TIME CLOCK**.....Exact **File Transfer Time** is displayed on screen, in Minutes & Seconds, during the transfer process.....

- **ONLY ONE A-L NEEDED**.....Complete File Operation requires only '**one**' side to have the **APPLE-LINK Communications System !!**

- **COMPLETE ERROR CHECK**....All file transfers are **checked for errors**, and if detected, will retransmit the bad block until it is received correctly ... **No more BAD data**...

- **XFER COMPLETION REPORT**..As an operator aid, a **Transfer Completion Report** is generated automatically showing the status of all selected files. Errors, displayed in inverse, show type of problem encountered, for **easy** correction.

- **CONVERSE MODE**.....Allows two operators to **Communicate** using the apple keyboard.

- **DIRECT TO DISK XFER**.....**APPLE-LINK** reads and writes directly to diskette, eliminating Load/Save time and **reducing phone costs**

APPLE-CRYPT - Disk Encryption Device

Using both Hardware & Software, Apple-Crypt provides the user with Multi-level Data Encryption to protect sensitive information from unauthorized disclosure.

A programmable, electronic, Pocket Key inserted into the device gives additional In House Employee Security, with passwords for selectable diskettes. The Utility Diskette further provides Crypt/decrypt for any DOS 3.3 compatible diskette with Backup capability for archival purposes

AUTOMATED BUILDING DIRECTORY SYSTEM:

Installed in a secure cabinet in the lobby of a large office building this system Provides a complete Tenet/personal listing of all occupants in the building.

A telephone link provides auto-dial to any office or person listed in the directory. Clients no longer need to personally visit an office to inquire if a certain person is available.

Using the Nibble News Parameter Disk

To use the Auto-Load files stored on the Nibble News disk, refer to Chapter 6 of your NIBBLES AWAY][Manual.

Some of the Auto-loads on this disk are split into two parts, the first will be saved as the name of the program, the second will have the word 'SECTMOD' after it. The procedure to follow is:

1. Xecute the first Auto-load file as normal.
2. Xecute the second file, but when prompted to insert your disks, insert the DUPLICATE diskette into DRIVE 1, then press a key. This will perform the SECTMOD portion of the backup.

The Nibble News Auto-Load disk contains 4 separate Auto-Load directories. When you look at the disk you will see about 56 entries. This is Auto-Load directory 1. To view the other directories it is necessary to make a GLOBAL modification to NIBBLES AWAY][. This is done by entering the GLOBAL modifier (press 'MG' from the main menu). Then you should type in the byte value '5E67'. NA][will then ask you for a value to enter. The value may be found in the table below:

Desired Directory	Value to enter
1	11
2	10
3	13
4	14

NOTE: When one of these changes has been made, you should reboot NA][before using the Filer for anything other than another parameter from the Nibble News Auto-Load file disk.

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